editorials

Waging War on War Metaphors in Cancer and COVID-19

Jonathan M. Marron, MD, MPH[1-3]; Don S. Dizon, MD[4,5]; Banu Symington, MD, MACP[6]; Michael A. Thompson, MD, PhD, FASCO[7]; and Abby R. Rosenberg, MD, MS, MA[8,9]

As oncologists, we are all too familiar with the use of war metaphors in clinical practice, which dates at least as far back as President Richard Nixon's declaration of a "War on Cancer" via the National Cancer Act in 1971, when he referred to cancer as a "relentless and insidious enemy."[1,2] The war on cancer, although it has been slow, has been successful; the age-adjusted mortality rate for invasive cancers in the United States has decreased by at least 23% in the 40 years since Nixon's declaration,[3] with similar improvements seen in high-income countries around the world.[4,5] Perhaps in response to this call to arms and advances that followed, war metaphors have steadily made their way into the lexicon of oncology practice.

Research has reported that metaphors are present in as many as two thirds of conversations between oncologists and their patients.[6] We talk about a patient's "fight" against their disease and laud those "battling" against significant odds. We say that clinicians, patients, and caregivers form a "united front" against cancer, the "common enemy." We describe how cancers "invade" healthy tissues and how our medicines "attack" cancer cells; we speak of treatment as "front-line" therapy and express optimism about the promise of new "targeted agents." When individuals complete their cancer treatment, we call them "survivors," "heroes," and "cancer veterans." War metaphors have even insidiously infiltrated the world of oncology publishing. The section in *Journal of Clinical Oncology* devoted to narratives about the experiences of those with cancer and those who care for them was, until relatively recently, entitled "The Art of Oncology: When the Tumor Is Not the Target."[7,8]

Metaphors carry a certain appeal; one study demonstrated that individuals with cancer reported less difficulty understanding physicians who used a greater number of metaphors.[6] War metaphors in particular may seem to be beneficial because they are straightforward and easy to understand. It is much simpler to discuss taking potentially toxic chemotherapy to ward off an anthropomorphized evil entity, for example, than to delve into the nuances of unintended treatment toxicities and prognostic uncertainty. Metaphors may help personalize discussions and broach topics such as end-of-life care that might otherwise be difficult to initiate.[9] For some, they may help bridge the gaps caused by uncertainty and the unknown.[10] Ultimately, these linguistic shortcuts can help fill awkward silences and avoid the all-too-frequent "I don't know what to say" problem.

In spite of their appeal, however, it is not clear that war metaphors are beneficial. Wars have winners and losers, and in war, the winner typically is whoever has greater strength, more resources, and more willing combatants. Is this the message we hope to send to people with cancer? If cancer is a war, it is one we might not win, no matter how we define victory. When someone dies from cancer, is it because they didn't fight hard enough? If they choose to focus on their quality of life rather than pursue cure-directed therapy, are they waving the white flag?

Violence metaphors expressed by patients with cancer, although they are valuable for some, often lead to feelings of disempowerment, guilt, and fatalism.[11,12] People perceive treatment to be more difficult when it is described with war metaphors than when it is described using other terminology.[11] Moreover, by portraying cancer as a formidable enemy to actively combat, we undermine passive cancer prevention strategies like smoking cessation, given that self-limitation and restraint are inconsistent with stereotypical battle strategies.[12,13] Although these metaphors are a common part of oncology parlance, they may actually do more harm than good.

The COVID-19 pandemic has given war metaphors new life. The medical literature, lay press, and social media frequently refer to the "battle" against coronavirus, health care workers as "heroes," and life on the "front lines" of the pandemic. We discuss "suiting up" with personal protective equipment (PPE) before entering a patient's room, as if our flimsy protective garments were body armor. Politicians around the world have embraced this, spouting rhetoric about the war on COVID-19. Many countries, including the United States, have gone so far as to invoke legislation previously used only in a literal rather than a metaphorical war.[14]

As cancer specialists, we have noticed how war metaphors are used somewhat differently with COVID-19 than with cancer. Although violent descriptors of the war on cancer place patients in a position of action,

Author affiliations and support information (if applicable) appear at the end of this article.

Accepted on July 8, 2020 and published at ascopubs.org/journal/op on July 31, 2020: DOI https://doi.org/10.1200/OP.20.00542

if not power,[11] war metaphors pertaining to COVID-19 seem more passive, describing patients as victims or innocent bystanders. In addition, patients are often described as heroes in the fight against cancer; with COVID-19, that mantle is more commonly bestowed on health care workers.[15]

This heroization of health care workers is particularly problematic. Although few clinicians would take issue with the gratitude and positivity conveyed with this moniker, the implication of these individuals being heroes is, to borrow another war metaphor, a double-edged sword. Outside of conscripted service, those in the military have enlisted voluntarily. When they signed up, they were aware of the hazards of battle and joined in spite of them, out of a sense of duty to serve others. Many health care workers are driven by a similar sense of duty, but COVID-19 has changed the frame of reference for the health care community. Few entered their field anticipating risking their lives to take care of patients. Fewer still expected to be asked to work outside their specialty, to not be able to see their families for weeks at a time, to risk the well-being of their family by "bringing the war home," or to experience first-hand seeing colleagues become sick, and in some cases, "lose the battle" to COVID-19.

Perhaps the most glaring discrepancy in imagery depicting health care workers as heroes is the ongoing lack of PPE. Shortages of N95 respirators and other PPE have been reported worldwide,[16] giving rise to numerous global grassroots movements like #GetUsPPE. Whereas soldiers would never be asked to venture into battle without proper equipment, the "armed forces" in this particular conflict are often armed quite inadequately.

If health care workers are heroes, what risks must they assume in their quest to care for patients? The heroic soldiers storm into battle even if their likelihood of survival is low; they put their life in danger to save a fallen compatriot even without adequate protection. If health care workers are viewed in this same light, are we expected to do the same, even without adequate PPE? Although many clinicians would willingly take on such risks, the scales tip when this moves from option to expectation. If a heroic health care worker has features putting them at high-risk for COVID-19, must they continue to be a hero, no matter their level of personal risk? What about the "health care hero" with children at home? Are they no longer heroic if they choose to spend time caring for their children instead of being on the "front lines"?

When applying these metaphorical labels, some groups inevitably get preferential focus. There has been significant discussion of the heroism of doctors and nurses but far less of others in health care: technologists, nursing assistants, clinical administrative staff, custodial staff, and many others who take similar risks and whose efforts ensure that patients continue to receive high-quality care in spite of current circumstances. And finally, referencing health care workers as heroes may implicitly devalue other essential employees (including public transportation workers, grocery store employees, delivery staff, and those in law enforcement) who take similar personal risks to perform their jobs during the pandemic but receive far fewer accolades for doing so.

Taken together, COVID-19 war metaphors carry risks similar to those of cancer war metaphors. Although we all root for our heroes in battle, we feel fear when they falter or fall and when bystanders are also victims: the powerlessness of facing this daunting enemy threatens both individual and societal psychological well-being. Some patients, caregivers, and health care workers may appreciate and even benefit from war metaphors, but it is important to consider potential unintended consequences of their usage (Table 1). There are many ways to demonstrate support for health care workers and other essential staff during the COVID-19 pandemic without heroization, including advocating for additional PPE and observing guidelines on social distancing and masking. Rather than cheer for the heroes on the virtual front, let us recognize that we all have a role to play in the efforts to stop this pandemic, both in the oncology community and more generally. Simultaneously, we as clinicians can find other ways to discuss both cancer and COVID-19 without the crutch of war metaphors. Language is a tool we use to engage and communicate with patients. Just as with other health care tools, we are responsible for recognizing and minimizing its harms.

As an alternative to potentially harmful war metaphors, we recommend using simple, straightforward language about diagnosis, prognosis, and treatment. Communication between clinicians and patients, whether about cancer, COVID-19, or any other disease, is complex, and language should serve as a means of building rapport and promoting understanding. As a first step, clinicians who are conscious of their own use of metaphors can tailor their use according to patient preferences, cultural values, and other relevant characteristics.[17] Optimally, however, war metaphors should be avoided, and should instead be replaced with direct but compassionate communication, followed by patient inquiries to confirm that patients understand what is being said. This can be a challenging, time-intensive process, but various guides are available to support communication about prognosis and other relevant topics.[18]

In oncology, we may have already lost the war against war metaphors, but the experience of the oncology community can serve as a cautionary tale in the era of COVID-19. Use war metaphors with caution; they are an ethical minefield.

TABLE 1. War Metaphors in Cancer and COVID-19

Metaphor	Positive Implications	Negative Implications
Cancer		
The "war" on cancer	Easy to understand Can instill for some a sense of purpose	Leads to assumptions of winners (those cured) and losers (those who die or whose disease recurs/progresses)
Patients as heroes	Empowerment Acknowledgment of cancer treatment as a difficult process	Minimizes the contributions of other efforts, such as those in cancer control, risk reduction, and drug discovery
"Ready to fight"	Empowerment and a sense of control Action-based	Assumes the ability to fight (and win) is in the patient's power Equates the choice "not to fight" with giving up, not wanting to win, and weakness
"Beating" cancer	Activates patients, families, and communities against a common foe Suggests action and strength	Victimizes those who cannot "beat" the disease May imply that those who "lose" didn't try hard enough
COVID-19		
The "war" on COVID-19	Expresses the urgency of the pandemic Serves as a rallying cry for medical societies and the public	Assumes we have enough personnel, a national strategy, and the right weapons and protections
Health care workers as heroes	Empowering, positive framing Acknowledges the significant risks health care workers face	Implies that all health care workers choose to put themselves in harm's way, even at their own personal risk Minimizes the work and efforts of workers not in the health care field
PPE as armor	Highlights the urgency of PPE shortages in health care, locally and nationally	May worsen PPE shortage because of increased demand from the public Oversimplifies the science of disease contagion
Fighters on the "front lines"	Recognizes the risks being taken by those potentially and actually exposed to the virus	Enables passivity from the larger community because of a disconnectedness with the COVID-19 problem Minimizes the risks taken and work performed by others, including other health care staff and nonmedical essential workers

AFFILIATIONS

[1]Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Harvard Medical School, Boston, MA
[2]Center for Bioethics, Harvard Medical School, Boston, MA
[3]Office of Ethics, Boston Children's Hospital, Boston, MA
[4]Lifespan Cancer Institute, Providence, RI
[5]Brown University, Providence, RI
[6]Sweetwater Regional Cancer Center, Rock Springs, WY
[7]Aurora Cancer Care, Advocate Aurora Health, Milwaukee, WI
[8]Seattle Children's Hospital, Seattle, WA
[9]Seattle Children's Research Institute, University of Washington School of Medicine, Seattle, WA

CORRESPONDING AUTHOR

Jonathan M. Marron, MD, MPH, Dana-Farber/Boston Children's Cancer and Blood Disorders Center, 450 Brookline Ave, Boston, MA 02215; Twitter: @JonMarronMD, @DFBC_PedCare, @harvardmed; e-mail: jonathan_marron@dfci.harvard.edu.

AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST AND DATA AVAILABILITY STATEMENT

Disclosures provided by the authors and data availability statement (if applicable) are available with this article at DOI https://doi.org/10.1200/OP.20.00542.

AUTHOR CONTRIBUTIONS

Conception and design: All authors
Financial support: Jonathan M. Marron
Administrative support: Jonathan M. Marron
Collection and assembly of data: Jonathan M. Marron, Don S. Dizon, Michael A. Thompson
Data analysis and interpretation: Jonathan M. Marron, Don S. Dizon, Michael A. Thompson, Abby R. Rosenberg
Manuscript writing: All authors
Final approval of manuscript: All authors
Accountable for all aspects of the work: All authors

ACKNOWLEDGMENT

We thank the other members of the American Society of Clinical Oncology Ethics Committee, whose conversations served as the inspiration for this manuscript, and Molly McGinnis for her invaluable support of this work. Supported by the Ethics Advisory Board for Partner Therapeutics (J.M.M.), the Harvard Medical School Center for Bioethics (J.M.M.), ASCO/Conquer Cancer (J.M.M.), and the National Cancer Institute (A.R.R.). Funding sources had no role in any aspect of this work.

REFERENCES

1. National Cancer Institute: National Cancer Act of 1971. https://www.cancer.gov/about-nci/overview/history/national-cancer-act-1971
2. Wiggins NM: Stop using military metaphors for disease. BMJ 345:e4706, 2012
3. National Cancer Institute: SEER Cancer Statistics Review, 1975-2015. https://seer.cancer.gov/archive/csr/1975_2015/results_merged/topic_annualrates.pdf

4. Quaresma M, Coleman MP, Rachet B: 40-year trends in an index of survival for all cancers combined and survival adjusted for age and sex for each cancer in England and Wales, 1971-2011: A population-based study. Lancet 385:1206-1218, 2015
5. Australian Institute of Health and Welfare: Cancer in Australia 2019. March 21, 2019. https://www.aihw.gov.au/reports/cancer/cancer-in-australia-2019/data
6. Casarett D, Pickard A, Fishman JM, et al: Can metaphors and analogies improve communication with seriously ill patients? J Palliat Med 13:255-260, 2010
7. Loprinzi CL, Canellos GP: A new addition to the Journal of Clinical Oncology: The Art of Oncology—When the Tumor Is Not the Target. J Clin Oncol 18:3, 2000
8. Abratt RP: When the tumor is not the target: A title whose time is up? J Clin Oncol 21:4463, 2003
9. Hui D, Zhukovsky DS, Bruera E: Serious illness conversations: Paving the road with metaphors. Oncologist 23:730-733, 2018
10. Hardy JN: Metaphor may fill the space created by uncertainty. BMJ 345:e5468, 2012
11. Semino E, Demjén Z, Demmen J, et al: The online use of violence and journey metaphors by patients with cancer, as compared with health professionals: A mixed methods study. BMJ Support Palliat Care 7:60-66, 2017
12. Hauser DJ, Schwarz N: The war on prevention II: Battle metaphors undermine cancer treatment and prevention and do not increase vigilance. Health Commun 1-7, 2019
13. Hauser DJ, Schwarz N: The war on prevention: Bellicose cancer metaphors hurt (some) prevention intentions. Pers Soc Psychol Bull 41:66-77, 2015
14. Savage C: The Trump administration's legal moves to prevent a meat shortage, explained. The New York Times, April 29, 2020. https://www.nytimes.com/2020/04/29/us/trump-meat-shortage-coronavirus.html
15. Bauchner H, Easley TJ: Health care heroes of the COVID-19 pandemic. JAMA 323:2021, 2020
16. Miller AM: WHO: The chronic, global shortage of PPE 'is one of the most urgent threats to our collective ability to save lives.' Business Insider. March 27, 2020. https://www.businessinsider.com/who-global-shortage-of-ppe-is-urgent-threat-2020-3
17. Reisfield GM, Wilson GR: Use of metaphor in the discourse on cancer. J Clin Oncol 22:4024-4027, 2004
18. LeBlanc TW, Marron JM, Ganai S, et al: Prognostication and communication in oncology. J Oncol Pract 15:208-215, 2019

AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Waging War on War Metaphors in Cancer and COVID-19

The following represents disclosure information provided by authors of this manuscript. All relationships are considered compensated unless otherwise noted. Relationships are self-held unless noted. I = Immediate Family Member, Inst = My Institution. Relationships may not relate to the subject matter of this manuscript. For more information about ASCO's conflict of interest policy, please refer to www.asco.org/rwc or ascopubs.org/op/authors/author-center.

Open Payments is a public database containing information reported by companies about payments made to US-licensed physicians (Open Payments).

Jonathan M. Marron
Consulting or Advisory Role: Partner Therapeutics
Open Payments Link: https://openpaymentsdata.cms.gov/physician/802634/summary

Don S. Dizon
Stock and Other Ownership Interests: InfiniteMD, NeuHope
Consulting or Advisory Role: I-Mab Biopharma, Clovis Oncology, AstraZeneca, Regeneron Pharmaceuticals, TESARO
Research Funding: Merck Sharp & Dohme (Inst), Bristol Myers Squibb (Inst), Kazia Therapeutics (Inst), TESARO (Inst)
Open Payments Link: https://openpaymentsdata.cms.gov/physician/744193/summary

Michael A. Thompson
Stock and Other Ownership Interests: Doximity
Consulting or Advisory Role: Celgene, AIM Specialty Health, Via Oncology, Takeda, GlaxoSmithKline, Strata Oncology, Syapse Precision Medicine Council, Adaptive Biotechnologies, AbbVie
Research Funding: Takeda (Inst), Bristol Myers Squibb (Inst), TG Therapeutics (Inst), CRAB CTC (Inst), AbbVie (Inst), PrECOG (Inst), Strata Oncology (Inst), Lynx Biosciences (Inst), Denovo Biopharma (Inst), ARMO Biosciences (Inst), GlaxoSmithKline (Inst)
Patents, Royalties, Other Intellectual Property: UpToDate, Peer Review for Plasma Cell Dyscrasias (Robert Kyle, editor)
Travel, Accommodations, Expenses: Takeda, GlaxoSmithKline, Syapse, Doximity
Open Payments Link: https://openpaymentsdata.cms.gov/physician/192826/summary

No other potential conflicts of interest were reported.